O.: 209310US0

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

VERONIQUE GUILLOU, ET AL.

: EXAMINER: WANG, S.

SERIAL NO: 09/886,216

FILED: JUNE 22, 2001

: GROUP ART UNIT: 1617

FOR:

FOAMING COSMETIC CREAM

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

Appellants appeal the final rejection of Claims 1-27 of the above-identified application set forth in the Official Action dated September 10, 2002 (paper no.9).

I. Real Party of Interest

The real party of interest is L'Oreal located at 14, Rue Royale 75008, Paris, France by virtue of the assignment recorded in the U.S. Patent and Trademark Office on October 10, 2001 at reel/frame 012248/0674.

II. Related Appeals and Interferences

The best of the assignee's and appellants' undersigned representative's knowledge, there are no related appeals or interferences.

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III. Status of Claims

Claims 1-27 are the only claims pending in the above-identified application and are attached as Exhibit 1.

Claims 1-27 are appealed herein.

IV. Summary of the Invention

The pending claims are related to physiologically-acceptable compositions comprising a surfactant system such that at least one paracrystalline phase of a direct and/or cubic type appears when the temperature increases above 30°C and remains present up to at least 45°C. As noted in the present specification, many difficulties exist in preparing cosmetic or dermatological cleansing compositions (for example, thermal stability problems), particularly when the compositions are in the form of a foaming cream (page 2, line 1 through page 3, line 6 of the specification).

The claimed invention addresses such problems and generally provides a thermally-stable, physiologically-acceptable cleansing compositions for application to the skin, scalp, and/or hair. As such, the presently claimed invention represents an advance in the art deserving of patent protection.

V. <u>Issues</u>

- (1) The first issue in this case is whether Claims 1-7 and 9-19 are anticipated under the meaning of 35 U.S.C. § 102(b) over U.S. Patent No. 6,007,769 (U.S. '769).
- (2) The second issue in this case is whether Claims 21, 23, 25 and 27 are anticipated under the meaning of 35 U.S.C. § 102(b) over EP 0339994 (EP '994).

(3) The third issue in this case is whether Claims 1-22, 24 and 26 are obvious within the meaning of 35 U.S.C. § 103(a) over the combination of U.S. '769 in view of EP 0598335 (EP '335).

VI. Grouping of the Claims

Claims 1-27 do not stand or fall together as each of these claims is separately patentable. In the arguments below, Appellants explain why each of these claims is believed to be separately patentable.

VII. Argument

Issue 1

The rejected claims are patentable under 35 U.S.C. § 102(b) over U.S. '769 for the following reasons.

It is well-settled law that the standard set forth in § 102(b) is that of novelty. Lack of novelty, i.e., anticipation requires strict identity between the claimed invention and that disclosed in the prior art reference. To anticipate a claim, a single prior art source must contain all of the essential limitations of the claim *Verdegaal Bros. v. Union Oil Co. of California* 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, U.S. '769 does not disclose each and every limitation of the claims, and provide no guidance that would lead one of ordinary skill in the art to the invention as claimed.

As noted above and presented in Exhibit 1, the invention claimed in Claim 1 provides a physiological-acceptable composition with a surfactant system which exhibits at least one paracrystalline phase when the temperature increases above 30°C and remains present up to at least 45°C. Thus, the paracrystalline phase appears at a temperature above 30°C but not

below 30°C. As discussed at length below, U.S. '769 does NOT describe such a surfactant system.

U.S. '769 describe single phase soap composition containing hexagonal phase liquid crystals which as described in column 3, lines 25-30, are rod-shaped micelles that are packed in a hexagonal array and separated by a continuous water region. U.S. '769 also describes the temperatures at which the hexagonal phases are present according to the U.S. '769 invention—see Figure 5, which shows that hexagonal phases ("E") form at temperatures of 25°C (see also column 10, lines 22-35, which describes Figure 5). The entire disclosure of U.S. '769 is concerned with specific concentrations of fatty acids, e.g., oleic acid, in combination with water which forms hexagonal liquid phases. However, U.S. '769 does not describe a surfactant system which exhibits a hexagonal phase when the temperature increases above 30°C as required in the present claims. Clearly, a surfactant system that forms a hexagonal phase at 25°C is different from a surfactant system which exhibits a hexagonal phase when the temperature increases above 30°C.

Notwithstanding this significant difference, the Office has taken the position that "when or how the crystalline phase is moot. The compositions disclosed in the cited references do exhibit the crystal phase above 30°C." (Advisory Action, paper no.14). It appears that the Office does not understand the invention. The surfactant system in, e.g., Claim 1, exhibits a paracrystalline phase **when** the temperature increases above 30°C. Thus, the paracrystalline phase appears at a temperature above 30°C but not below 30°C, which simply cannot be the same as a surfactant system which exhibits a structural phase at temperatures below 30°C.

The Office's assertion has no factual basis. For example, assuming that the Office's position is correct, if a first compound A has a melting temperature of 20°C and second, different compound B has a melting temperature of 30°C, then above 30°C both compounds

would be melted and since both compounds above 30°C are melted, they are the same compound. As is immediately clear, this is not a correct analysis and is the analogous to the rationale set forth in the Advisory Action. Therefore, the claimed recitation of a surfactant system exhibiting a paracrystalline phase when the temperature increases above 30°C must be different from a surfactant system that exhibits a structural phase below 30°C. Any contrary conclusion is without merit.

U.S. '769 cannot qualify under 35 U.S.C. § 102(b) as anticipatory of the claimed invention because there simply is no guidance for preparing a composition with a surfactant system as in Claim 1. Accordingly, there is nothing in U.S. '769 that constitutes anticipation under U.S. patent law. U.S. '769 cannot and do not anticipate the claims. The elements of the reference are not arranged as required by the claims, the disclosure of the prior art does not allow one of ordinary skill to "at once envisage" the claimed invention. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990); *In re Petering* 133 USPQ 275 (CCPA, 1962). Because the reference does not meet the very stringent requirements necessary for a reference to qualify as anticipatory under 35 U.S.C. § 102, the Examiner's rejection should be REVERSED.

Furthermore, since U.S. '769 does not describe the surfactant system in the present claims, U.S. '769 does not and cannot describe the further limitations provided in Claims 2-7 and 9-19 when combined with the surfactant system element in Claim 1. Therefore, each of Claims 2-7 and 9-19 are separately patentable over U.S. '769.

Issue 2

Claims 21, 23, 25 and 27 are not anticipated under 35 U.S.C. § 102(b) over EP '335 because EP '335 fails to describe a surfactant system which exhibits a paracrystalline phase when the temperature increases above 30°C and remains present up to at least 45°C.

Claim 21 is shown in the attached Exhibit 1 and provides a process for cleansing skin, scalp or hair by applying a physiologically-acceptable composition comprising a surfactant system such that it exhibits at least one paracrystalline phase when the temperature above 30°C and remains present up to at least 45°C. To anticipate a claim, a single prior art source must contain <u>all</u> of the essential limitations of the claim (*Verdegaal Bros, supra*). In this case, EP '335 does not disclose each and every limitation of the claims, and provide no guidance that would lead one of ordinary skill in the art to the invention as claimed.

EP '335 describes cleaning compositions containing VI phases, which as described on page 6, lines 27-35, exhibit a cube symmetrical diffraction pattern and are cubic liquid crystalline phases. Furthermore, on page 6, lines 50-51, EP '335 describes "all references herein to the formation or existence of specific phases or structures are to be construed, unless the context requires otherwise, as references to their **formation or existence at 20°C**." (emphasis added). Clearly, the surfactants used to form the VI phase in EP '3315 cannot be the same as surfactants which exhibit a paracrystalline phase **when** the temperature increases above 30°C. This is further supported by the fact that on page 8, lines 8-11, EP '335 describes that "the surfactants are preferably selected to provide a VI phase which melts above 30°C." How can a surfactant system providing a VI (cubic) phase which melts above 30°C (EP '335) be the same as one which exhibits a paracrystalline (e.g., cubic) phase when the temperature increases above 30°C and remains present up to at least 45°C? They simply cannot be the same. Notwithstanding the additional preferred ranges of melting temperatures

of the VI phases on page 8, lines 8-11, it is clear that the surfactants in EP '335 are not the same as those claimed in light of the differences outlined above.

Appellants reiterate that eh Office's position stated in the Advisory Action is without merit and has no basis in fact, or in basic chemistry. Therefore, EP '335 does not and cannot provide the requisite disclosure to prepare a composition comprising a surfactant system which exhibits at least one paracrystalline phase when the temperature increases above 30°C and remains present up to at least 45°C for cleansing the skin, scalp or hair as required in the present Claim 21. Because these reference does not meet the very stringent requirements necessary for a reference to qualify as anticipatory under 35 U.S.C. § 102, the Examiner's rejection should be REVERSED.

Claim 23 depends from Claim 21 and provides that a cubic phase when the temperature increases above 30°C and remains present up to at least 45°C. Since EP '335 does not describe a surfactant system that exhibits a cubic phase when the temperature increases above 30°C, Claim 23 is patentable over EP '335.

Claim 25, depends from Claim 1 (composition) and provides that the surfactant system that exhibits a cubic phase when the temperature increases above 30°C and remains present up to at least 45°C. Since EP '335 does not describe a surfactant system that exhibits a cubic phase when the temperature increases above 30°C, Claim 25 is patentable over EP '335.

Claim 27 depends from Claim 20. Claim 20 provides a method for cleansing grime from skin, scalp or hair with a composition comprising a surfactant system that exhibits a cubic phase when the temperature increases above 30°C and remains present up to at least 45°C. Since EP '335 does not describe a surfactant system that exhibits a cubic phase when the temperature increases above 30°C, Claim 27 is patentable over EP '335.

Issue 3

"To establish a *prima facie* case of obviousness, three basic criteria must be met.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." (M.P.E.P. § 2143.03 and *In re Royka* 180 USPQ 580 (CCPA 1974)).

Here, the combination of prior art does not in any way suggest a composition formulated with a surfactant system which exhibits a paracrystalline phase when the temperature increases above 30°C. In fact, there is no evidence of record that prior to the present invention, one would select a surfactant system exhibiting the paracrystalline phase to prepare a composition for cleansing skin, scalp or the hair as set forth in the present claims.

Claim 1 is discussed above and shown in the attached Exhibit 1.

The differences between U.S. '769 and the present invention have been discussed in great detail above. To reiterate, nowhere in the '769 disclosure is there a description for a surfactant system as claimed and as a result there can be, in fact, no suggestion or motivation to modify the teachings of the '769 disclosure to select the surfactant system provided in, e.g., Claim 1. Even when combined with EP '994, this prior art disclosure does not get any closer to the claimed invention because there simply is no disclosure in the two pieces of prior art that lead one to prepare a composition with the surfactant system as claimed.

EP '994 does not describe a temperature at which or above which a surfactant system would exhibit a paracrystalline phase. Rather EP '994, like U.S. '769, is concerned with the formation of various micelle and hexagonal phases at different concentrations of fatty alcohol ethoxylate and fatty acids (see the Figure attached to EP '994).

As a basis for this rejection, the Office has stated:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of Lance-Gomez by the addition of thickening agents and betaines, as well as the use of such compositions for washing skin and hair in order to benefit from compositions with improved foam due to the betaines as well as mildness on skin due to the presence of nonionic surfactants as taught by Rosser. (page 5, paper no. 6).

It is not clear from this how this rationale supports a basis for preparing a composition with a surfactant system as claimed. In fact, the combination of prior art does not and cannot describe or provide any suggestion to select a surfactant system which exhibits a paracrystalline phase when the temperature increases above 30°C. If it is the Office's intention to rely on the theory of inherency, Appellants' point out that it is the Office's burden to show that something in the prior art is inherent. As noted by the court in *In re Oelrich*, 212 USPQ 323 (CCPA 1981), the mere fact that a certain thing may result from a given set of circumstances is not sufficient to prove inherency. Inherency may not be established by probabilities or possibilities. Something that is inherent must <u>inevitably</u> be the result <u>each and every time</u>. Here there is no evidence that the prior art combination provides any disclosure or suggestion for the invention claimed in, e.g., Claim 1.

Therefore, the Office's rejection under 35 U.S.C. § 103 has no basis and as such should be REVERSED.

Furthermore, since U.S. '769 combined with EP '994 does not suggest selecting the surfactant system in Claim 1, this combination of prior art does not and cannot describe the methods set forth in Claims 20, 21, 22, 23, 26 and 27 nor the further limitations provided in Claims 1-19 and 24. Therefore, each of Claims 1-22, 24 and 26 are separately patentable over U.S. '769.

VIII. Conclusion

Based on the foregoing, Claims1-27 are patentable under 35 U.S.C. § 102 and 35 U.S.C. § 103 notwithstanding the prior art cited by the Examiner. Therefore, the Examiner's rejections should be REVERSED.

Respectfully submitted,

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EXHIBIT 1

- 1. A physiologically-acceptable composition comprising a surfactant system in an aqueous medium, wherein said surfactant system exhibits at least one paracrystalline phase selected from the group consisting of direct hexagonal phase, cubic phase, and mixtures thereof, when the temperature increases above 30 °C and remains present up to at least 45 °C.
- 2. The composition according to Claim 1, wherein the paracrystalline phase is at least one direct hexagonal phase.
- 3. The composition according to Claim 1, wherein said surfactant system further comprises a lamellar phase when the temperature increases above 30 °Cwhich remains present up to at least 45 °C.
- 4. The composition according to Claim 1, wherein said composition has $|G^*|$ modulus ranging from 10^2 to 10^5 Pa at a temperature of 25°C and a loss angle δ ranging from 10 to 45° for frequencies ranging from 10^{-2} to 10 Hz.
- 5. The composition according to Claim 1 wherein the surfactant system comprises at least one water-soluble surfactant and at least one water-insoluble surfactant.
- 6. The composition according to Claim 1, wherein the surfactant system comprises at least one water-soluble anionic surfactant.
- 7. The composition according to Claim 6, wherein the water-soluble anionic surfactant is chosen from the group consisting of carboxylic acids and their salts, ethoxylated carboxylic acids and their salts, sarcosinates and acylsarcosinates and their salts, taurates and methyltaurates and their salts, isethionates and acylisethionates and their salts, sulphosuccinates and their salts, alkyl sulphates and alkyl ether sulphates and their salts, monoalkyl and dialkyl esters of phosphoric acid and their salts, alkanesulphonates and their salts, bile salts, lipoamino acids and their salts, geminal surfactants and their mixtures.

- 8. The composition according to Claim 5, wherein the water-soluble surfactant is an amphoteric or zwitterionic surfactant chosen from the group consisting of betaines, sulphobetaines, alkylamphoacetates and their mixtures.
- 9. The composition according to Claim 5, wherein the water-soluble surfactant is a nonionic surfactant chosen from the group consisting of polyol ethers, polyglycerol ethers and esters, polyoxyethylenated fatty alcohols, alkyl-C₁-C₁₄ polyglucosides, alkyl glucopyranosides and alkyl thioglucopyranosides, alkyl maltosides, alkyl-N-methylglucamides, polyoxyethylenated sorbitan esters, aminoalcohol esters and their mixtures.
- 10. The composition according to Claim 5, wherein the water-insoluble surfactant is chosen from the group consisting of carboxylic acids and their salt, esters of glycerol and fatty acids, alkyl-C₁₅-C₃₀ polyglucosides, optionally oxyethylenated sterol and phytosterol derivatives, alkaline salts of cholesterol sulphate, alkaline salts of cholesterol phosphate, polyoxyethylenated fatty alcohols, dialkyl phosphates, lecithins, sphingomyelins, ceramides and their mixtures.
- 11. The composition according to Claim 1, wherein the surfactant system is present in an amount, as active material, ranging from 20 to 65% by weight with respect to the total weight of the composition.
- 12. The composition according to Claim 1, wherein the surfactant system comprises from 10 to 50% by weight of water-soluble surfactant with respect to the total weight of the composition.
- 13. The composition according to Claim 1, wherein the surfactant system comprises at least 15% by weight of water-soluble surfactant with respect to the total weight of the composition.

- 14. The composition according to Claim 1, wherein the surfactant system comprises at least 10% by weight of water-soluble soap with respect to the total weight of the composition.
- 15. The composition according to Claim 1, wherein the surfactant system comprises from 5 to 50% by weight of water-insoluble surfactant with respect to the total weight of the composition.
- 16. The composition according to Claim 1, wherein the surfactant system comprises an overall amount of soaps of at least 20% by weight with respect to the total weight of the composition.
- 17. The composition according to Claim 1, further comprising at least one solvent chosen from the group consisting of lower alcohols, polyols, sugars and their mixtures.
- 18. The composition according to Claim 1, further comprising at least one thickening agent.
- 19. The composition according to Claim 1, wherein said surfactant system exhibits at least one paracrystalline phase selected from the group consisting of direct hexagonal phase, cubic phase, and mixtures thereof, at temperatures above 45 °C.
 - 20. A process for cleansing grime from skin, scalp or hair comprising:

applying to the skin, scalp or hair a physiologically-acceptable composition comprising a surfactant system in an aqueous medium, wherein said surfactant system exhibits at least one paracrystalline phase selected from the group consisting of direct hexagonal phase, cubic phase, and mixtures thereof, when the temperature increases above 30 °C and remains present up to at least 45 °C;

forming a foam of said surfactant system by a massaging action; and rinsing said foam with water.

21. A process for cleansing skin, scalp or hair comprising:

applying to the skin, scalp or hair a physiologically-acceptable composition comprising a surfactant system in an aqueous medium, wherein said surfactant system exhibits at least one paracrystalline phase selected from the group consisting of direct hexagonal phase, cubic phase, and mixtures thereof, when the temperature increases above 30 C and remains present up to at least 45 C;

forming a foam of said surfactant system by a massaging action; and rinsing said foam with water.

- 22. The process according to Claim 21, wherein said composition is a foaming cream composition.
- 23. The process according to Claim 21, wherein said surfactant system exhibits a cubic phase when the temperature increases above 30 °C and remains present up to at least 45 °C.
- 24. The composition according to Claim 1, wherein said composition is a foaming cream composition.
- 25. The composition according to Claim 1, wherein said surfactant system exhibits a cubic phase when the temperature increases above 30 °C and remains present up to at least 45 °C.
- 26. (New) The process according to Claim 20, wherein said composition is a foaming cream composition.
- 27. (New) The process according to Claim 20, wherein said surfactant system exhibits a cubic phase when the temperature increases above 30 C and remains present up to at least 45 C.



Docket No.: 209310US0

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ATTORNEYS AT LAW

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 09/886,216

Veronique GUILLOU, et al. Applicants:

Filing Date: June 22, 2001

For: FOAMING COSMETIC CREAM

Group Art Unit: 1617 Examiner: WANG. S.

SIR:

Attached hereto for filing are the following papers:

APPEAL BRIEF (IN TRIPLICATE)

Our check in the amount of \$320.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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